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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte MICHAEL J. WOOKEY, TREVOR WATSON,
and JEAN CHOUANARD

Appeal 2008-3105
Application 10/067,165
Technology Center 2400

Decided: ¹ March 30, 2009

Before JOHN C. MARTIN, LEE E. BARRETT, and
LANCE LEONARD BARRY, *Administrative Patent Judges*.

MARTIN, *Administrative Patent Judge*.

DECISION ON APPEAL

¹ The two-month time period for filing an appeal or commencing a civil action, as recited in 37 C.F.R. § 1.304, begins to run from the decided date shown on this page of the decision. The time period does not run from the Mail Date (paper delivery) or Notification Date (electronic delivery).

STATEMENT OF THE CASE

This is an appeal under 35 U.S.C. § 134(a) from the Examiner's rejection of claims 1-18, which are all of the pending claims.

We have jurisdiction under 35 U.S.C. § 6(b). We affirm.

A. Appellants' invention

Appellants' invention relates to remote service delivery for computer networks. Specification 2:24-25.

By way of background, Appellants explain that in a remote services system, often large numbers of messages are sent to multiple destinations of the customer, for example, when a remote services system needs to push a software update to all of the customer components. *Id.* at 3:9-12. The transfer of a large number of messages from the remote services system to a customer site may waste network resources, as these messages tend to be large (e.g., several Mbytes of data). *Id.* at 3:12-14.

Appellants' Figure 11 is reproduced below.

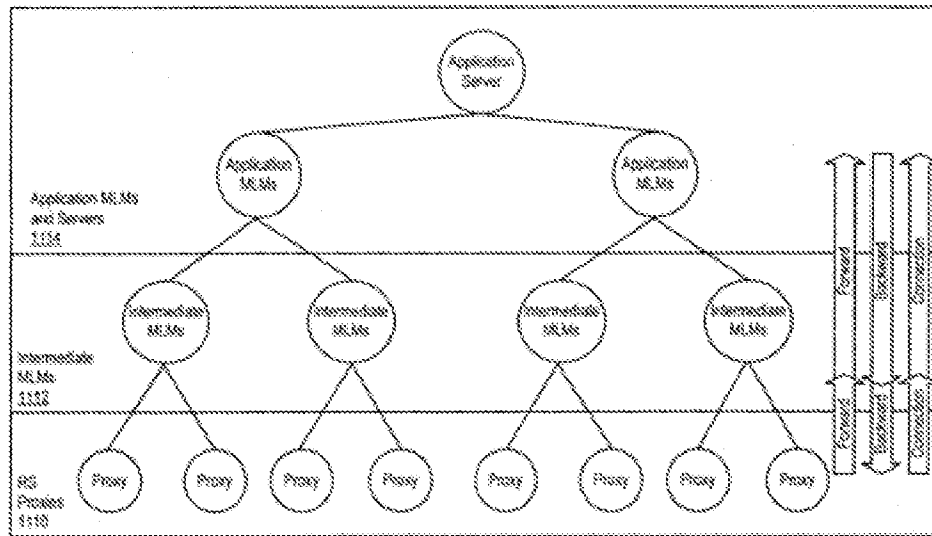


FIG. 11

Figure 11 shows a flow diagram of communications within a remote services architecture. *Id.* at 19:17-18. Communications within the remote service architecture involve three tiers: a remote services proxy tier 1110, an intermediate MLM (mid level manager²) tier 1112, and an application MLM and server tier 1114. *Id.* at 19:19-21. Communication is established and connections are made from the bottom tier (the remote services proxy tier) to the top tier. *Id.* at 19:21-22.

In Appellants' method, when a message is originated at an application server of the remote services system for a group of destinations, a single instance of a message is transferred from the application server to an intermediate MLM on the path of the group of components. *Id.* at 3:19-22.

² Specification 8:9.

The intermediate MLM duplicates the message for all of the final destinations and transmits the message. *Id.* at 3:22-23. Thus, the network resources used between the application server and the multiple destinations are minimized as no redundant transfer occurs between the application server and the intermediate MLM. *Id.* at 3:23-25.

In one embodiment, to which the claims are directed, the invention relates to communicating in a remote services system that includes a forward channel communication and a back-channel communication. *Id.* at 3:28-30.

The forward channel communicates using a forward channel communication path and the back-channel communicates using a back-channel communication path, which is established only after a forward channel communication path is established. *Id.* at 3:30-33. The back-channel communication path is used to multicast a message to a group of components. *Id.* at 3:33-34.

B. The claims

The independent claims are claims 1, 7, and 13, of which claim 1 reads:

1. A method of communicating in a remote services system comprising:
 - communicating a forward channel communication using a forward channel communication path;
 - communicating a back-channel communication using a back-channel communication path, the back-channel

communication path being established only after a forward channel communication path is established; and
using the back-channel communication path to multicast a message to a group of remote service components.
Claims App., Br. 16 (formatting modified).³

Claim 7 reads as follows:

7. A method of communicating in a remote services system comprising:
assigning a plurality of remote service components within the remote services system with a respective plurality of unique remote services identifiers;
communicating a forward channel communication using a forward channel communication path;
communicating a back-channel communication using a back-channel communication path; and
using the back-channel communication path to multicast a message to a group of remote services components based upon unique remote services identifiers corresponding to components of the group of remote service components.

August 3, 2005, “Response to Non-final Office Action” at 4-5 (formatting modified).⁴

³ References herein to the Brief are to the Amended Brief filed January 14, 2008. No Reply Brief was filed.

⁴ As noted in the Answer (at 3), the copy of claim 7 as reproduced in the Claims Appendix (Br. 16-17) is inaccurate because it corrects the second (Continued on next page.)

C. The references and rejections

The Examiner relies on the following references:

Kamentsky et al. (Kamentsky)	US 2002/0065929	May 30, 2002
Dyer et al. (Dyer)	US 6,349,340 B1	Feb. 19, 2002

Claims 1, 2, 5-8, 11-14, 17, and 18 stand rejected under 35 U.S.C. § 102(e) for anticipation by Dyer. Answer 4.

Claims 3, 4, 9, 10, 15, and 16 stand rejected under § 103(a) for obviousness over Dyer in view of Kamentsky. *Id.* at 7.

Claims 7-12 further stand rejected under § 112, second paragraph, for being indefinite due to the above-noted inconsistency in the use of the terms “remote service” and “remote services” in claim 7. *Id.* at 4.

In the Brief, Appellants state that “[t]he rejections of Claims 1, 7, and 13 under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent No. 6,349,340 by Dyer are the only rejections at issue in this Appeal” (Br. 3) and thus argue the merits of only the § 102(e) rejection of independent claims 1, 7, and 13. *Id.* at 3. However, Appellants further explain that “[a]s claims 2-6, 8-12 and 14-18 depend from claims 1, 7 and 13 respectively, the rejection of these claims under 35 U.S.C. § 102(e) or 35 U.S.C. § 103(a) is also without foundation” (*id.* at 15), making it clear that Appellants do not intend to concede the unpatentability of claims 2-6, 8-12 and 14-18 under § 102(e) or § 103(a). We are accordingly treating the rejections of those dependent

of the three underlined phrases to read “remote service.”

claims as standing or falling with the § 102(e) rejection of respective parent claims 1, 7, and 13.

Appellants' discussion of the § 102(e) rejection of claims 1, 7, and 13 addresses those claims in two groups, the first group consisting of claim 1 (Br. 10-13) and the second group consisting of claims 7 and 13. *Id.* at 13-15.

Regarding the § 112 rejection of claims 7-12, Appellants state:

The Appellant acknowledges a typographical error in claim 7 fostering a rejection of claims 7-12 under 35 U.S.C. § 112. While not an issue for the purposes of this appeal, Appellant acknowledges the mistake and upon resolution of this appeal will propose an amendment to rectify this deficiency.

Br. 3. Because Appellants have not shown error in the Examiner's § 112 rejection of claims 7-12, we are summarily affirming their rejection on that ground.

THE ISSUE

Appellants have the burden to show reversible error by the Examiner in maintaining the rejections. *See In re Kahn*, 441 F.3d 977, 985-86 (Fed. Cir. 2006) (“On appeal to the Board, an applicant can overcome a rejection by showing insufficient evidence of *prima facie* obviousness or by rebutting the *prima facie* case with evidence of secondary indicia of nonobviousness.”) (quoting *In re Rouffet*, 149 F.3d 1350, 1355 (Fed. Cir. 1998)).

The sole issue is whether Appellants have shown that the Examiner erred in reading the claimed “forward channel communication using a

forward channel communication path” on Dyer’s communication of a request for data from a client node to a server and in reading the claimed “back-channel communication using a back-channel communication path” on Dyer’s communication of the requested data over a source communication channel to a plurality of client nodes.

PRINCIPLES OF LAW

“To anticipate a claim, a prior art reference must disclose every limitation of the claimed invention, either explicitly or inherently.” *In re Schreiber*, 128 F.3d 1473, 1477 (Fed. Cir. 1997).

ANALYSIS

Dyer discloses a method for providing improved performance in networks using multicast technology. Dyer, col. 1, ll. 14-16.

Dyer’s Figure 1 shows a plurality of client computers 2 connected through a LAN 4 to a server 6 (*id.*, col. 4, ll. 23-27), which is an application server computer system having a network operating system for serving files for clients connected to the network 4. *Id.*, col. 5, ll. 29-31.

Dyer’s Figure 3 is reproduced below.

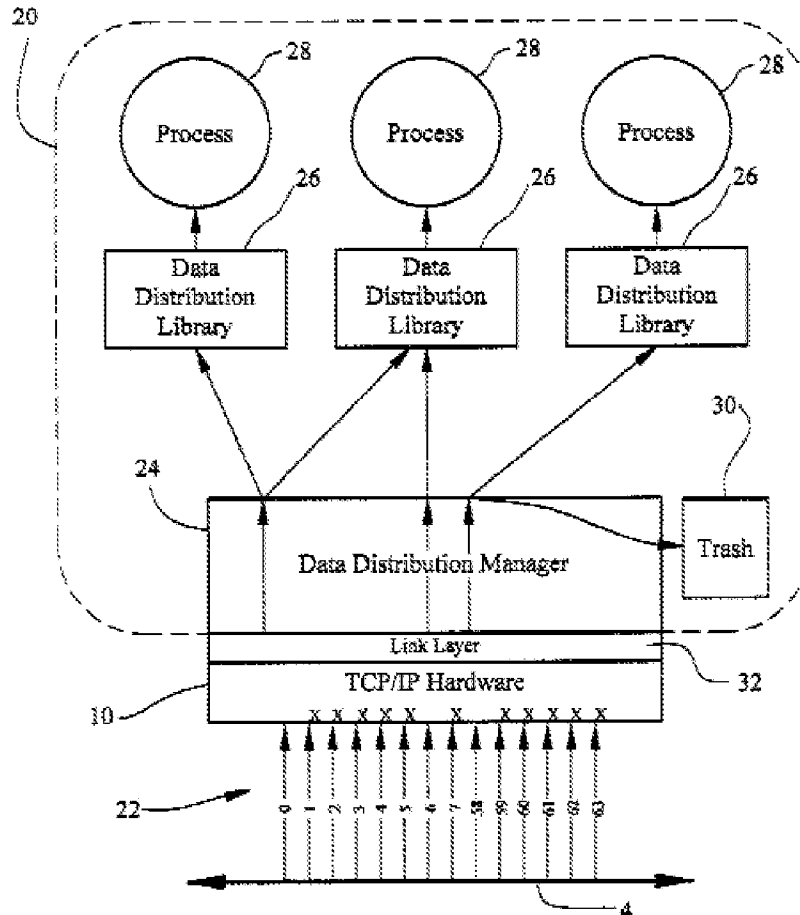


FIG. 3

Figure 3 is a high level architecture of a typical network client node 2 in Figure 1 showing network application software 20 and network interface circuitry 10 (*id.*, col. 5, ll. 41-43), labeled “TCP/IP Hardware” in Figure 3. Requests for data are initiated by processes 28. *See id.*, col. 5, ll. 52-53 (“[E]ach process 28 can request data cataloged in the data distribution library 26.”) (bolding omitted).

The interface circuitry 10 includes up to sixty-four addressable

channels 22 for receiving and transmitting data streams onto the LAN 4. *Id.*, col. 6, ll. 15-18. The data distribution manager 24 distributes only the requested data to the requesting processes 28 by performing filtering in the TCP/IP hardware 10 (i.e., by disabling unwanted channels) and by performing software filtering in data distribution manager 24. *Id.*, col. 7, ll. 7-10. The hardware channels 22 to be enabled and disabled are determined either statically or dynamically by data distribution manager 24. *Id.*, col. 7, ll. 10-19. In the static solution, a configuration file can be created in the data distribution manager 24 to include a static mapping of data domains corresponding to the requested data to hardware channels 22. *Id.*, col. 7, ll. 20-23. Thus, upon a request for data by a process 28, the data distribution manager 24 need only consult the configuration file to determine an appropriate channel 22 to enable in the interface circuitry 10. *Id.*, col. 7, ll. 23-26.

Several dynamic solutions are disclosed (*id.*, col. 7, ll. 35-36). In one dynamic solution, apparently relied on by the Examiner, “the data distribution manager 24 can receive a point-to-point message from the source of the requested data identifying an appropriate channel 22 through which the data distribution manager 24 can receive the requested data.” *Id.*, col. 7, ll. 36-40 (bolding omitted). *See also id.*, col. 2, ll. 47-50; *id.*, col. 7, ll. 15-19. The message identifying an appropriate channel presumably is issued in response to a request for data communicated over a channel 22 from the client to the server. Although the Examiner did not specifically

rely on the above-cited passages addressing a dynamic solution, those passages appear to provide the basis for Dyer's statement that "[e]ach of the *requests for data* and requested data *can be communicated* between the processes 28 and the LAN 4 *through channels 22* leading to and from the interface circuitry 10" (*id.*, col. 5, ll. 54-57) (bolding omitted, emphasis added), on which statement the Examiner does rely, citing it as a basis for finding that the claimed "communicating a forward channel communication using a forward channel communication path" reads on Dyer's use of a "channel for receiving client request or subscription for multicast." Final Action 3, para. 7b. Also, the Examiner specifically explains that "Dyer's disclosure includes the teachings of processes and steps of a *source server receiving requests from client nodes* for data, establishing a source communication channel with the client nodes and multicast the requested data to client nodes." Answer 8-9 (emphasis added). It is therefore clear that the request on which the Examiner reads the claimed "forward channel communication" is the request for data communicated from the client node though channels 22 to the server and not the "request" referred to in the following passage, which is a request for data sent by a process 28 to the data distribution manager 24 within a client node:

The method can include receiving from a process in a client node a request for multicast data; identifying a source for the requested multicast data; determining a source communications channel for receiving the requested multicast data; enabling the source communications channel; receiving the multicast data through the source communications channel;

and, forwarding the multicast data to the requesting client node process.

Dyer, col. 2, ll. 31-38.

The Examiner reads the claimed “back-channel communication using a back-channel communication” on “determining and enabling the source communication channel for receiving the requested multicast data.” Final Action 3, para. 7b. In the above-discussed dynamic solution, the server responds to a request for data sent from a client node to the server by informing the client node of the identity of the source communication channel that will carry the requested data.

Regarding the last step of claim 1 (“using the back-channel communication path to multicast a message to a group of remote service components”), the Examiner explained that “once the client is subscribed to the data distribution service, server multicast message [*sic*] to all subscribing clients.” Final Action 3, para. 7c. Although column 2, lines 31-30 of Dyer, cited as support (*id.*), describe “forwarding the multicast data to the requesting client node process,” which occurs inside a client node, at page 9 of the Answer the Examiner additionally relies on Dyer’s disclosure that “in the preferred embodiment, the server 5 sends to each client node 2 all multicast data without regard to the requirements of each client node 2,” citing column 6, lines 1-3. It is therefore clear that the Examiner is reading the claimed “group of remote service components” on a plurality of client nodes 2 rather than on the plurality of processes 28 within a client node.

Appellants, after quoting Dyer’s above-quoted passage (col. 2, ll. 31-

38) that includes describing Dyer's method as including "forwarding the multicast data to the requesting client node process," argue that the rejection is improper because "the channel used to forward the multicast data appears to be the *same* channel upon which the request arrived" (Br. 11-12) (emphasis added). This argument is unconvincing because it is incorrectly assumes that the Examiner is reading the claimed "forward channel" and "back-channel" on communications between processes 28 and data distribution manager 24 within a client node. Instead, as explained above, the Examiner reads the claimed "forward channel communication" on a request sent from client node 2 to the server 6a reads the claimed "back-channel communication path" that is used "to multicast a message to a group of remote service components" on Dyer's use of a source communication channel to send multicast data to a plurality of client nodes 2.

As Appellants have not shown error in the Examiner's rejection of claim 1, we are affirming the rejection of that claim. Because Appellants have not separately argued the merits of the rejections of claims 2-6, which depend on claim 1, we are also affirming the rejections of those claims. 37 C.F.R. § 41.37(c)(1)(vii) (2007); *In re Nielson*, 816 F.2d 1567, 1572 (Fed. Cir. 1987).

Turning now to independent claims 7 and 13, which are argued as a group, we elect for consideration claim 7.

The Examiner (Answer 5, para. e) reads the "unique remote services identifiers" recited in the "assigning" step on Dyer's disclosure that the

configuration file used by data distribution manager 24 to identify the source for requested multicast data “can include a static mapping of any identifier corresponding to a source of the requested multicast data, for example a proprietary network address or a network adapter address corresponding to the network source of the multicast data.” Dyer, col. 7, ll. 28-33. Appellants agree that Dyer teaches that an IP address or subscriber ID/information is evidence of a respective unique remote service identifier (Br. 15) but argue that “Dyer, as discussed above, associates these identifiers with the forward channel, not the back-channel as is claimed.” *Id.* (underlining omitted). This argument is unconvincing for the reasons given in the above discussion of claim 1.

For the foregoing reasons, we are affirming the § 102(e) rejection of claims 7 and 13. Because Appellants have not separately argued the merits of the rejections of claims 8-12 and 14-18, which depend on claims 7 and 13, respectively, we are also affirming the rejections of those claims.

DECISION

The Examiner’s decision that claims 1-18 are unpatentable over the prior art is affirmed, as is the Examiner’s decision that claims 7-12 are unpatentable under the second paragraph of 35 U.S.C. § 112.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a). *See* 37 C.F.R. § 1.136(a)(1)(iv) (2008).

Appeal 2008-3105
Application 10/067,165

AFFIRMED

msc

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